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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/871,408	05/31/2001	Izhak Baharav	10003977-1	9280

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AGILENT TECHNOLOGIES, INC.
Legal Department, DL429
Intellectual Property Administration
P.O. Box 7599
Loveland, CO 80537-0599

EXAMINER

SHERALI, ISHRAT I

ART UNIT PAPER NUMBER

2621

DATE MAILED: 02/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/871,408

Applicant(s)

BAHARAV ET AL

Examiner

Sherali Ishrat

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6, 8 -16, 19, 21-26 and 28-33 is/are rejected.
- 7) ☒ Claim(s) 4,5,7,17,18,20 and 27 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Response to Arguments

1. This action is in response to Applicant's argument received on 11/30/2005.

Applicant's arguments are fully considered however they are moot due to new grounds of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 9, 11-16, 23-26, 30, 32-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herley (US 5,838,818) in view of Tao (US 6,809,765).

Regarding claims 1, 13 and 24 Herley discloses demosaicing a mosaiced image (col. 5 lines 1-11) comprising:

receiving mosaiced image, mosaiced image being representation of a scene of interest (Herley, Fig. 6, 610 and 620, col. 1 lines 11-15, and col. 5 lines 49-50, note that the scene of interest is obvious because of digital cameral); and processing said mosaiced image using a demosaicing operator on blocks of

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mosaiced image to derive a representation of demosaiced image (Herley, col. 3 line 66- col. 4 line 37),

demosaicing operator incorporating transformation operator to take into account a subsequent frequency-based compression process (Herley col. 4, lines 65-col. 5, line 30, col. 5 lines 1-11, This teaching is read on the claimed language because the color interpolation (demosaicing) of Herley must satisfy the DCT coefficient requirement or, another words, the DCT operation (frequency based transform) is incorporated in the color interpolation process , (because the DCT process), incorporated a DCT operator to take into account a subsequent frequency based compression process),

compressing demosaiced image using frequency based compression (Herley, JPEG, Figs. 5-6, col. 5, lines 31-62).

As Applicant has argued, Herley has not explicitly shown demosaicing operator incorporating frequency based transformation.

In the same field of endeavor Tao discloses demosaicing operator incorporating frequency based transformation (Tao in col. 4, lines 40-55, shows filter used in demosaicing incorporate frequency based transformation which in this case Tao shows to be wavelet transformation).

There it would have been obvious to one having ordinary skill in the art at the invention was made to use the use the teaching Tao of using frequency based demosaicing operator as shown by Tao in the system Herley because such a process is required for demosaicing filter/operator because demosaicing filter

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required to have good frequency response, be interpolating and be smooth which is provided by wavelet filter as stated by Tao in col. 4, lines 40-45.

Regarding claims 3, 9, 11-12, 14-16, 23, 25-26, 30, 32-33, the basis or reasoning for rejection set forth in the previous office action is maintained.

4. Claims 6, 8, 19 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herley (US 5,838,818) in view of Tao (US 6,809,765) and further in view Zhang et al. (US 6,731,794).

Regarding claims 6,8, 19 and 28 the basis or reasoning for rejection set forth in the previous office action is maintained.

Allowable Subject Matter

5. Claims 4-5, 7, 17, 18, 20 and 27 are objected as being dependent on rejected claim but would be allowable if rewritten in independent form including limitations of the base claim and any intervening claims.

Communication

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sherali Ishrat whose telephone number is 571-272-7398. The examiner can normally be reached on 8:00 AM - 4:30PM.

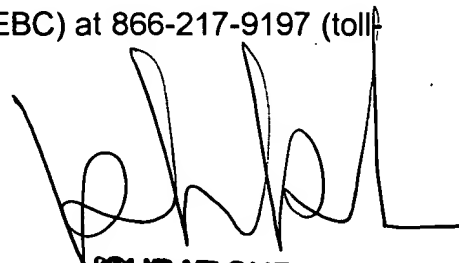
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella can be reached on 571-272-7778. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ishrat Sherali

February 15, 2006



ISHRAT SHERALI
PATENT EXAMINER
ARTUNIT 2621